

SPLIT TYPE ROOM AIR CONDITIONER OPERATION MANUAL



HSU-09HR03/R2(DB)
HSU-12HR03/R2(DB)
HSM09HRAC03/R2(DB)
HSM12HRAC03/R2(DB)
HSM18HRAC03/R2(DB)
HSU-09HRA103/R2
HSU-12HRA103/R2
HSU-18HRA103/R2

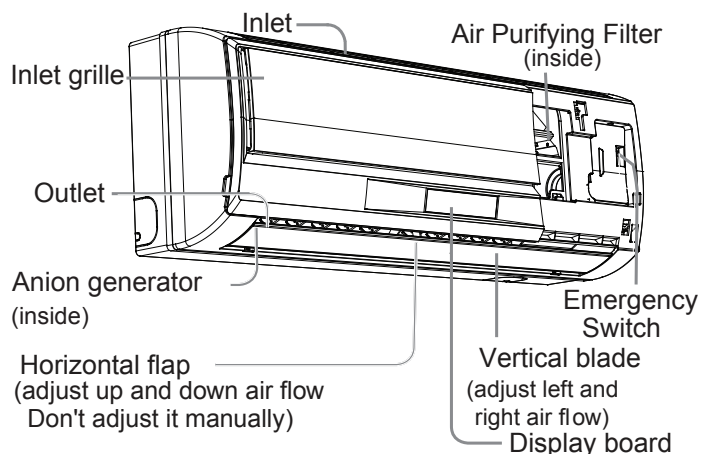
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- Please read this operation manual before using the air conditioner.
Keep this operation manual for future reference.

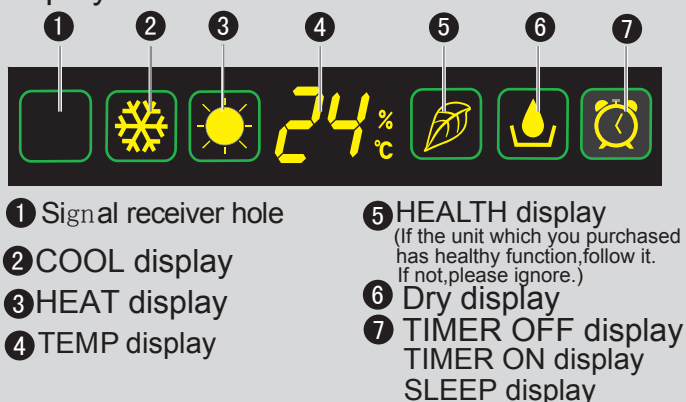
Parts and Functions

Indoor Unit

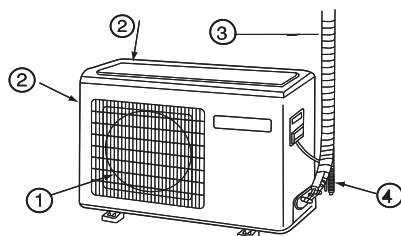


Actual indoor unit may vary from the one shown in the manual, according to the product purchased.

Display board



Outdoor Unit



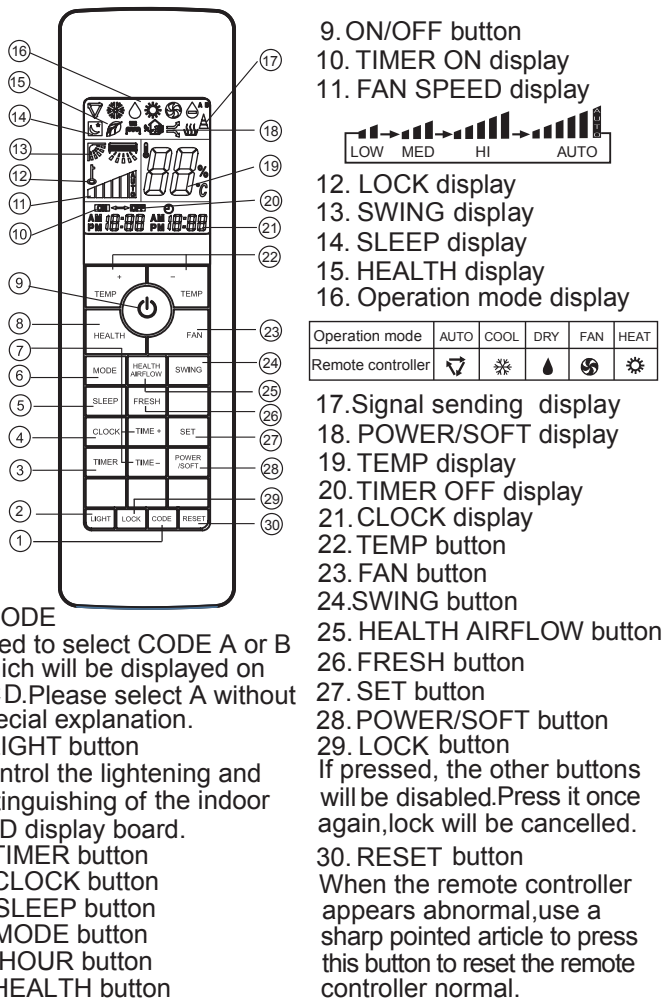
- ① OUTLET ③ CONNECTING PIPING AND ELECTRICAL WIRING
② INLET ④ DRAIN HOSE

Clock set

Press CLOCK button, "AM" or "PM" flashes. Press Δ or ∇ to set correct time. Each press will increase or decrease 1min. If the button is kept pressed, time will change quickly. After time setting is confirmed, press SET, "AM" and "PM" stop flashing, while clock starts working.

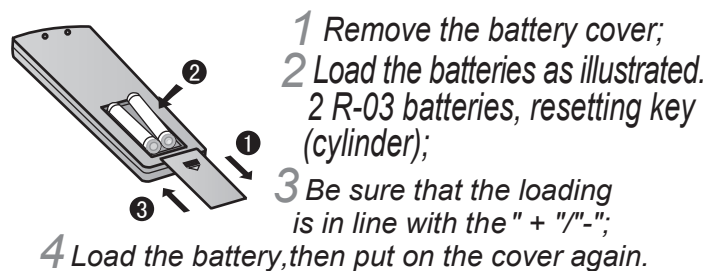


Remote controller



The following functions and related displays are not available: ① ②⑥ LIGHT button is not available for HSU-09HRA103/R2 and HSU-12HRA103/R2.

Loading of the battery



Note:

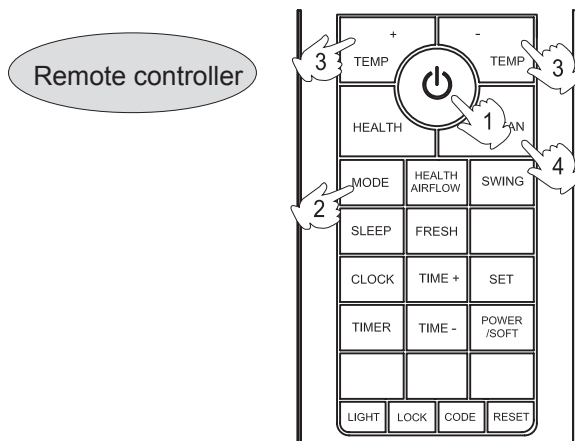
- The distance between the signal transmission head and the receiver hole should be within 7m without any obstacle as well.
- When electronic-started type fluorescent lamp or change-over type fluorescent lamp or wireless telephone is installed in the room, the receiver is apt to be disturbed in receiving the signals, so the distance to the indoor unit should be shorter.
- Full display or unclear display during operation indicates the batteries have been used up. Please change batteries.
- If the remote controller can't run normally during operation, please remove the batteries and reload several minutes later.

Hint:

Remove the batteries in case unit won't be in usage for a long period. If there are any display after taking-out, just need to press reset key.

Operation

Base Operation



1. Unit start

Press ON/OFF on the remote controller, unit starts.

2. Select operation mode

Press MODE button. For each press, operation mode changes as follows:

Remote controller:



3. Select temp.setting

Press TEMP+ / TEMP- button

TEMP+ Every time the button is pressed, temp.setting increase 1°C, if kept depressed, it will increase rapidly

TEMP- Every time the button is pressed, temp.setting decrease 1°C, if kept depressed, it will decrease rapidly

Select a desired temperature.

4. Fan speed selection

Press FAN button. For each press, fan speed changes as follows:

Remote controller:



Air conditioner is running under displayed fan speed. When FAN is set to AUTO, the air conditioner automatically adjusts the fan speed according to room temperature.

Operation Mode	Display Board	Remote Controller	Note
AUTO			Under the mode of auto operation, air conditioner will automatically select Cool or Heat operation according to room temperature. When FAN is set to AUTO, the air conditioner automatically adjusts the fan speed according to room temperature.
COOL			
DRY			In DRY mode, when room temperature becomes lower than temp.setting+2°C, unit will run intermittently at LOW speed regardless of FAN setting.
HEAT			
FAN	nothing		In FAN operation mode, the unit will not operate in COOL or HEAT mode but only in FAN mode. AUTO is not available in FAN mode. And temp. setting is disabled. In FAN mode, sleep operation is not available.

Emergency operation and test operation

Emergency Operation:

- Use this operation only when the remote controller is defective or lost.
- When the emergency operation switch is pressed, the "Pi" sound is heard once, which means the start of this operation.
- In this operation, the system automatically selects the operation modes, cooling or fan or heat, according to the room temperature.



Room temperature	Operation mode	Designated temperature	Timer mode	Air flow
ABOVE 23°C	COOLING	26°C	NO	AUTOMATIC
BELOW 23°C	HEAT	23°C	NO	AUTOMATIC

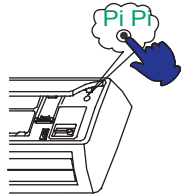
(cooling only unit) Room temperature	Operation mode	Designated temperature	Timer mode	Air flow
BELOW 23°C	FAN	26°C	NO	AUTOMATIC

- It is not possible to operate in dry mode.

Test operation:

Test operation switch is the same as emergency switch.

- Use this switch in the test operation when the room temperature is below 16°C, do not use it in the normal operation.
- Continue to press the test operation switch for more than 5 seconds. After you hear the "Pi" sound twice, release your finger from the switch: the cooling operation starts with the air flow speed "Hi".



Air Flow Direction Adjustment

1. Status display of air flow

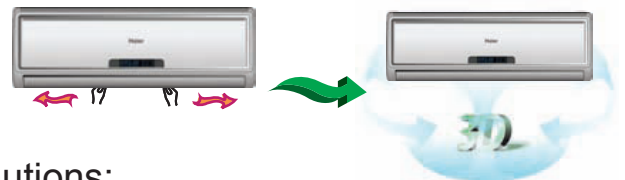
Vertical flap

Pos.1 Pos.2 Pos.3

Pos.4 Pos.5 Pos.6 (Auto swing)

2. Left and right air flow adjustment(manual)

Move the vertical blade by a knob on air conditioner to adjust left and right direction referring to Fig.



Cautions:

- When adjusting the flap by hand, turn off the unit.
- When humidity is high, condensate water might occur at air outlet if all vertical louvers are adjusted to left or right.
- It is advisable not to keep horizontal flap at downward position for a long time in COOL or DRY mode, otherwise, condensate water might occur.

Note:

When restart after remote turning off, the remote controller will automatically memorize the previous set swing position.

Operation

■ Sleep Operation

Before going to bed, you can simply press the SLEEP button and unit will operate in SLEEP mode and bring you a sound sleep.



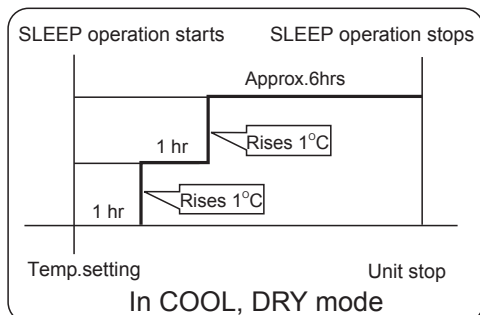
Use of SLEEP function

After the unit starts, set the operation status, then press SLEEP button before which the clock must be adjusted and time being set.

Operation Mode

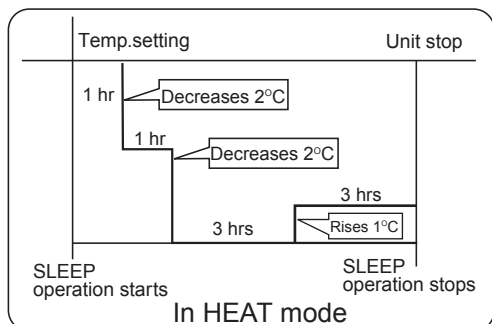
1. In COOL, DRY mode

1 hours after SLEEP mode starts, temp. will become 1°C higher than temp. setting. After another 1 hours, temp. rises by 1°C further. The unit will run for further 6 hours then stops. Temp. is higher than temp. setting so that room temperature won't be too low for your sleep.



2. In HEAT mode

1 hours after SLEEP mode starts, temp will become 2°C lower than temp. setting. After another 1 hours, temp decrease by 2°C further. After more another 3 hours, temp. rises by 1°C further. The unit will run for further 3 hours then stops. Temp. is lower than temp. setting so that room temperature won't be too high for your sleep.



3. In AUTO mode

The unit operates in corresponding sleep mode adapted to the automatically selected operation mode.

4. In FAN mode

It has no SLEEP function.

5. Set the wind speed change when sleeping

If the wind speed is high or middle before setting for the sleep, set for lowering the wind speed after sleeping.

If it is low wind, no change.

Note

When TIMER function is set, the sleeping function can't be set up. After the sleeping function is set up, if user resets TIMER function, the sleeping function will be cancelled; the machine will be in the state of timing-on.

■ POWER/SOFT Operation

(1) POWER Operation

When you need rapid heating or cooling, you can use this function. In COOL mode, fan speed automatically takes high speed of AUTO fan mode. In HEAT mode, fan speed automatically takes medial speed of AUTO fan mode.

(2) SOFT Operation

You can use this function when silence is needed for rest or reading. In SOFT operation mode, fan speed automatically takes low speed of AUTO fan mode.

Note :

During POWER operation, in rapid HEAT or COOL mode, the room will show inhomogeneous temperature distribution. Long period SOFT operation will cause effect of not too cool or not too warm.

To cancel POWER or SOFT operation Press POWER/SOFT button again, POWER or SOFT disappears.

The following functions and related displays are not available:

HSU-09HRA103/R2, HSU-12HRA103/R2

■ HEALTHY Operation



Healthy Negative ions

The anion generator in the air conditioner can generate a lot of anion effectively balance the quantity of positive and anion in the air and also to kill bacteria and speed up the dust sediment in the room and finally clean the air in the room.

Operation

Timer On/Off On-Off Operation

Set clock correctly before starting TIMER operation.

1. After unit starts, select your desired operation mode.
2. Press TIMER button to change TIMER mode. Every time the button is pressed, display changes as follows:

Remote controller:



Then select your desired TIMER mode (TIMER ON or TIMER OFF or TIMER ON-OFF). "ON" or "OFF" will flash.

3. Press TIME+ /TIME- button to set time.

It can be adjusted within 24 hours.

4. After setting correct time, press SET button to confirm "ON" or "OFF" on the remote controller stops flashing.

5. Cancel TIMER mode

Just press TIMER button several times until TIMER mode disappears.

Hints:

After replacing batteries or a power failure happens, time setting should be reset.

Remote controller possesses memory function, when use TIMER mode next time, just press SET button after mode selecting if time setting is the same as previous one.

According to the Time setting sequence of TIMER ON or TIMER OFF, either Start-Stop or Stop-Start can be achieved.

Healthy airflow Operation

1. Press ON/OFF to starting

Setting the comfort work conditions.

2. The setting of healthy airflow function

1). Press the button of healthy airflow, appears on the display. Horizontal airflow sending. Avoid the airflow blows direct to the body.

2). Press the button of healthy airflow again, appears on the display. Downward airflow sending. Avoid the airflow blows direct to the body.

3. The cancel of the healthy airflow function

Press the button of healthy airflow again, the unit goes on working under the condition before the setting of healthy airflow function.

Notice: Do not direct the flap by hand. Otherwise, the grille will run incorrectly. If the grille is not run correctly, stop for a minute and then start, adjusting by remote controller.

Note:

1. After setting the healthy airflow function, the position grille is fixed.

2. In heating, it is better to select the mode.

3. In cooling, it is better to select the mode.

4. In cooling and dry, using the air conditioner for a long time under the high air humidity, condensate water may occur at the grille.

EUROPEAN REGULATIONS CONFORMITY FOR THE MODELS

CE

All the products are in conformity with the following European provision:

- Low Voltage Directive 73/23/EEC
- Low Voltage Directive 2006/95/EC
- Electromagnetic Compatibility 89/336/EEC
- Electromagnetic Compatibility 2004/108/EC

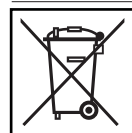
ROHS

The products are fulfilled with the requirements in the directive 2002/95/EEC of the European parliament and of council on the Restriction of the use of Certain Hazardous Substances in Electrical and Electronic Equipment (EU RoHS Directive)

WEEE

In accordance with the directive 2002/96/CE of the European parliament, herewith we inform the consumer about the disposal requirements of the electrical and electronic products.

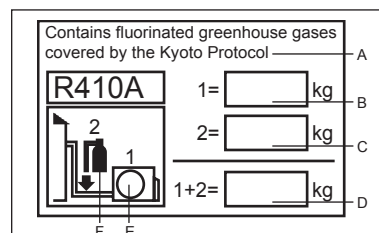
DISPOSAL REQUIREMENTS:



Your air conditioning product is marked with this symbol. This means that electrical and electronic products shall not be mixed with unsorted household waste. Do not try to dismantle the system yourself: the dismantling of the air

conditioning system, treatment of the refrigerant, of oil and of other part must be done by a qualified installer in accordance with relevant local and national legislation. Air conditioners must be treated at a specialized treatment facility for reuse, recycling and recovery. By ensuring this product is disposed of correctly, you will help to prevent potential negative consequences for the environment and human health. Please contact the installer or local authority for more information. Battery must be removed from the remote controller and disposed of separately in accordance with relevant local and national legislation.

IMPORTANT INFORMATION REGARDING THE REFRIGERANT USED



This product contains fluorinated greenhouse gases covered by the Kyoto Protocol. Do not vent into the atmosphere.

Refrigerant type: R410A

GWP* value: 1975

GWP = global warming potential

Please fill in with indelible ink,

- 1 the factory refrigerant charge of the product
- 2 the additional refrigerant amount charged in the field and
- 1+2 the total refrigerant charge

on the refrigerant charge label supplied with the product.

The filled out label must be adhered in the proximity of the product charging port (e.g. onto the inside of the stop valve cover).

A contains fluorinated greenhouse gases covered by the Kyoto Protocol

B factory refrigerant charge of the product: see unit name plate

C additional refrigerant amount charged in the field

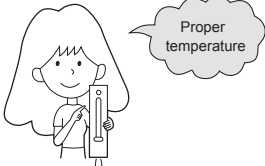
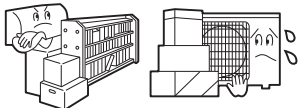


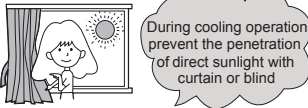
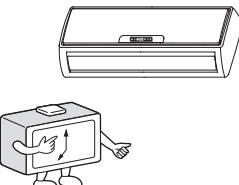



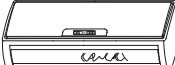
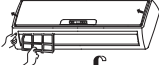

D total refrigerant charge

E outdoor unit

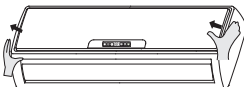
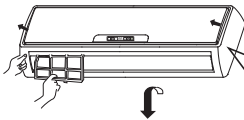

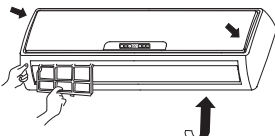
F refrigerant cylinder and manifold for charging

Maintenance

For Smart Use of The Air Conditioner

<p>Setting of proper room temperature</p> 	<p>Do not block the air inlet or outlet</p> 	<p>Remote Controller</p>  <p>Do not use water, wipe the controller with a dry cloth. Do not use glass cleaner or chemical cloth.</p>	<p>Indoor Body</p>  <p>wipe the air conditioner by using a soft and dry cloth. For serious stains, use a neutral detergent diluted with water. Wring the water out of the cloth before wiping, then wipe off the detergent completely.</p>
<p>Close doors and windows during operation</p> 	<p>Use the timer effectively</p> 	<p>Do not use the following for cleaning</p>  <p>Gasoline, benzene, thinner or cleanser may damage the coating of the unit.</p>  <p>Hot water over 40°C (104°F) may cause discoloring or deformation.</p>	
<p>If the unit is not to be used for a long time, turn off the power supply main switch.</p> 	<p>Use the louvers effectively</p> 	<p>Air Filter cleaning</p> <ol style="list-style-type: none"> 1 Open the inlet grille by pulling it upward. 2 Remove the filter. Push up the filter's center tab slightly until it is released from the stopper, and remove the filter downward. 3 Clean the filter. Use a vacuum cleaner to remove dust, or wash the filter with water. After washing, dry the filter completely in the shade. 4 Attach the filter. Attach the filter correctly so that the "FRONT" indication is facing to the front. Make sure that the filter is completely fixed behind the stopper. If the right and left filters are not attached correctly, that may cause defects. 5 Close the inlet grille.  	

Replacement of Air Purifying Filter

<ol style="list-style-type: none"> 1. Open the Inlet Grille Prop up the inlet grille by using a small device named grille-support which located in the right side of the indoor unit. 2. Detach the standard air filter Slide the knob slightly upward to release the filter, then withdraw it. 3. Attach Air Purifying Filter Put air purifying filter appliances into the right and left filter frames.   	<ol style="list-style-type: none"> 4. Attach the standard air filter (Necessary installation) 5. Close the Inlet Grille Close the Grille surely <p>ATTENTION:</p> <p>The white side of the photocatalyst air purifying filter face outside, and the black side face the unit. The green side of the bacteria-killing medium air purifying filter face outside, and the white side face the unit.</p> <p>NOTE:</p> <ul style="list-style-type: none"> • The photocatalyst air purifying filter will be solarized in fixed time. In normal family, it will be solarized every 6 months. • The bacteria-killing medium air purifying filter will be used for a long time, no need for replacement. But in the period of using them, you should remove the dust frequently by using vacuum cleaner or flapping them lightly, otherwise, its performance will be affected. • Please keep the bacteria-killing medium air purifying filter in the cool and dry conditions avoid long time directly sunshine when you stop using it, or its ability of sterilization will be reduced. 
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Cautions

WARNING

Please call Sales/Service Shop for the Installation.

Do not attempt to install the air conditioner by yourself because improper works may cause electric shock, fire, water leakage.

WARNING

When abnormality such as burnt-smell found, immediately stop the operation button and contact sales shop.

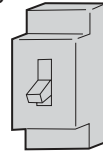


OFF



 **STRICT ENFORCEMENT**

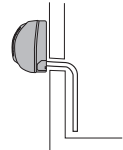
Use an exclusive power source with a circuit breaker



Check proper installation of the drainage securely



STRICT ENFORCEMENT



Connect power supply cord to the outlet completely



STRICT ENFORCEMENT

Use the proper voltage



STRICT ENFORCEMENT

1. Do not use power supply cord extended or connected in halfway
2. Do not install in the place where there is any possibility of inflammable gas leakage around the unit.
3. Do not get the unit exposed to vapor or oil steam.



PROHIBITION

Do not use power supply cord in a bundle.



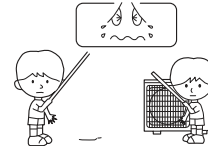
PROHIBITION

Take care not to damage the power supply cord.



PROHIBITION

Do not insert objects into the air inlet or outlet.



PROHIBITION

Do not start or stop the operation by disconnecting the power supply cord and so on.



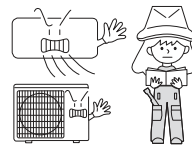
PROHIBITION

Do not channel the air flow directly at people, especially at infants or the aged.

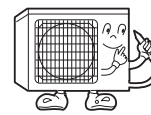


PROHIBITION

Do not try to repair or reconstruct by yourself.



Connect the earth cable.



earthing

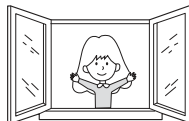
CAUTION

Do not use for the purpose of storage of food, art work, precise equipment, breeding, or cultivation.



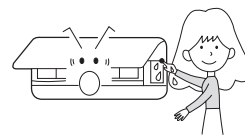
PROHIBITION

Take fresh air occasionally especially when gas appliance is running at the same time.



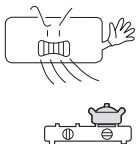
STRICT ENFORCEMENT

Do not operate the switch with wet hand.



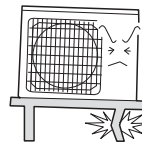
PROHIBITION

Do not install the unit near a fireplace or other heating apparatus.



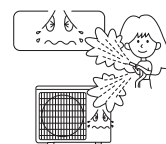
PROHIBITION

Check good condition of the installation stand



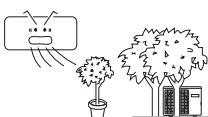
PROHIBITION

Do not pour water onto the unit for cleaning



PROHIBITION

Do not place animals or plants in the direct path of the air flow



PROHIBITION

Do not place any objects on or climb on the unit.

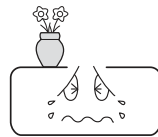


PROHIBITION

Do not place flower vase or water containers on the top of the unit.








PROHIBITION



Trouble shooting

Before asking for service, check the following first.

	Phenomenon	Cause or check points
Normal Performance inspection	The system does not restart immediately. 	<ul style="list-style-type: none"> When unit is stopped, it won't restart immediately until 3 minutes have elapsed to protect the system. When the electric plug is pulled out and reinserted, the protection circuit will work for 3 minutes to protect the air conditioner.
	Noise is heard 	<ul style="list-style-type: none"> During unit operation or at stop, a swishing or gurgling noise may be heard. At first 2-3 minutes after unit start, this noise is more noticeable. (This noise is generated by refrigerant flowing in the system.) During unit operation, a cracking noise may be heard. This noise is generated by the casing expanding or shrinking because of temperature changes. Should there be a big noise from air flow in unit operation, air filter may be too dirty.
	Smells are generated.	<ul style="list-style-type: none"> This is because the system circulates smells from the interior air such as the smell of furniture, paint, cigarettes.
	Mist or steam are blown out. 	<ul style="list-style-type: none"> During COOL or DRY operation, indoor unit may blow out mist. This is due to the sudden cooling of indoor air.
	In dry mode, fan speed can't be changed.	<ul style="list-style-type: none"> In DRY mode, when room temperature becomes lower than temp. setting+2 °C, unit will run intermittently at LOW speed regardless of FAN setting.
Multiple check		<ul style="list-style-type: none"> Is power plug inserted? Is there a power failure? Is fuse blownout?
	Poor cooling 	<ul style="list-style-type: none"> Is the air filter dirty? Normally it should be cleaned every 15 days. Are there any obstacles before inlet and outlet? Is temperature set correctly? Are there some doors or windows left open? Is there any direct sunlight through the window during the cooling operation?(Use curtain) Are there too much heat sources or too many people in the room during cooling operation?

Cautions

- Do not obstruct or cover the ventilation grille of the air conditioner. Do not put fingers or any other things into the inlet/outlet and swing louver.
- Do not allow children to play with the air conditioner. In no case should children be allowed to sit on the outdoor unit.

Specifications

- The refrigerating circuit is leak-proof.

The machine is adaptive in following situation

- Applicable ambient temperature range:

Cooling	Indoor	Maximum:D.B/W.B 32°C/23°C Minimum:D.B/W.B 21°C/15°C
	Outdoor	Maximum:D.B/W.B 43°C/26°C Minimum: D.B 18°C
Heating	Indoor	Maximum:D.B 27°C Minimum: D.B 0°C
	Outdoor	Maximum:D.B/W.B 24°C/18°C Minimum:D.B/W.B -7°C/-8°C
	Outdoor (INVERTER)	Maximum:D.B/W.B 24°C/18°C Minimum:D.B -15°C

- If the power supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person.
- If the fuse of indoor unit on PC board is broken, please change it with the type of T. 3.15A/ 250V. If the fuse of outdoor unit is broken, change it with the type of T.25A/250V
- The wiring method should be in line with the local wiring standard.
- After installation, the power plug should be easily reached.
- The waste battery should be disposed properly.
- The appliance is not intended for use by young children or infirm persons without supervision.
- Young children should be supervised to ensure that they do not play with the appliance.
- Please employ the proper power plug, which fit into the power supply cord.
- A breaker should be incorporated into fixed wiring. The breaker should be all-pole switch and the distance between its two contacts should be not less than 3mm.
- The power plug and connecting cable must have acquired the local attestation.
- In order to protect the units, please turn off the A/C first, and at least 30 seconds later, cutting off the power.
- Please don't insert any sensor on 3-way stop valve pipe fitting.

ATTENTION!

Through poor conditions of the electrical MAINS, shortly voltage drops can appear when starting the EQUIPMENT. This can influence other equipment (eg. Blinking of a lamp). If the MAINS-IMPEDANCE $Z_{max} < X$ OHM, such disturbances are not expected. (In case of need, you may contact your local supply authority for further information.)

FOR MODEL:

	X
HSU-09HRA103/R2	0.415
HSU-12HRA103/R2	0.317